

**AMENDMENTS TO THE CLAIMS:**

The following listing of claims replaces all prior listings, and all prior versions, of claims in the above-identified application.

**LISTING OF CLAIMS:**

1. (Currently amended) A cell-mediated immunological diagnostic method for paratuberculosis characterized by comprising:  
collecting blood of a subject animal, thereby providing collected blood;  
adding an anti-interleukin 10 (IL-10) antibody to the collected blood, while inducing cell-mediated immunological reaction against *Mycobacterium avium* subsp. *paratuberculosis* in the collected blood; and  
subsequent to said adding, measuring an amount of produced interferon- $\gamma$  (IFNy) in the blood;  
subsequent to said measuring, comparing between amounts of the produced interferon- $\gamma$  (IFNy) measured in the subject animal and that in a non-infected control animal; and  
distinguishing the subject animal from a non-infected control animal in a case where a statistically significant increase in amounts of produced interferon- $\gamma$  (IFNy) is measured in the subject animal.
  
2. (Previously presented) A cell-mediated immunological diagnostic method for paratuberculosis according to Claim 1, characterized in that the amount of produced IFNy in the blood is measured by an IFNy ELISA method.

3. (Currently amended) A cell-mediated immunological diagnostic method for mycobacterial disease or mycobacterial infection caused by a mycobacterium, characterized by comprising:

collecting the blood of a subject animal, thereby providing collected blood; adding an anti-interleukin 10 (IL-10) antibody to the collected blood, while inducing cell-mediated immunological reaction against said mycobacterium in the collected blood; and

subsequent to the adding, measuring an amount of produced interferon- $\gamma$  (IFN $\gamma$ ) in the blood;

subsequent to said measuring, comparing between amounts of the produced interferon- $\gamma$  (IFN $\gamma$ ) measured in the subject animal and that in a non-infected control animal; and

distinguishing the subject animal from a non-infected control animal in a case where a statistically significant increase in amounts of produced interferon- $\gamma$  (IFN $\gamma$ ) is measured in the subject animal.

4. (Previously presented) A cell-mediated immunological diagnostic method according to Claim 1, characterized in that cell-mediated immunological reaction against *Mycobacterium avium* subsp. *paratuberculosis* in the collected blood is induced by adding *Mycobacterium avium* subsp. *paratuberculosis* antigen selected from the group of *Mycobacterium avium* subsp. *paratuberculosis* PPD, live *Mycobacterium avium* subsp. *paratuberculosis* and soluble antigen obtained by heat-killed *Mycobacterium avium* subsp. *paratuberculosis* to the collected blood.

5. (Previously presented) A cell-mediated immunological diagnostic method according to Claim 1, wherein the subject animal is cattle.

6. (Previously presented) A cell-mediated immunological diagnostic method according to Claim 3, wherein the subject animal is cattle.

7. (New) A cell-mediated diagnostic method according to Claim 3, wherein said mycobacterial disease or mycobacterial infection is tuberculosis, and the cell-mediated immunological reaction is induced by adding a tuberculosis antigen to the collected blood, said diagnostic method being a diagnostic method for tuberculosis.

8. (New) A cell-mediated diagnostic method according to Claim 7, wherein said tuberculosis antigen is tuberculin PPD.

9. (New) A cell-mediated diagnostic method according to Claim 3, wherein said mycobacterial disease or mycobacterial infection is leprosy, and the cell-mediated immunological reaction is induced by adding a leprosy antigen to the collected blood, said diagnostic method being a diagnostic method for leprosy.

10. (New) A cell-mediated diagnostic method according to Claim 9, wherein said leprosy antigen is lepromin.